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U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT
BUREAU FOR DEMOCRACY, CONFLICT, AND HUMANITARIAN ASSISTANCE (DCHA)
OFFICE OF U.S. FOREIGN DISASTER ASSISTANCE (OFDA)

ASIA – ***Disaster Preparedness and Mitigation Programs***

Fact Sheet #1, Fiscal Year (FY) 2006

September 30, 2006

Background

People of the Asia-Pacific region are severely affected by natural hazards such as earthquakes, typhoons, floods, landslides, volcanoes, droughts, tsunamis, and wildfires. Asia's vulnerability is compounded by socio-economic conditions that steadily increase the impact of disasters. Demographic changes, urbanization, and environmental degradation have reduced the amount of habitable land available, forcing the settlement of hazard-prone, marginal lands, such as flood plains and steep slopes. In addition to natural disasters, civil crises and complex emergencies also impede development in the Asia-Pacific region. USAID/OFDA remains committed to assisting in the development of preparedness, mitigation, and emergency response capacities in the region for natural disasters and conflicts. Since 1995, USAID/OFDA has provided approximately \$45.3 million for ongoing preparedness and mitigation projects throughout the region. To date in FY 2006, USAID/OFDA has provided more than \$7.6 million for disaster preparedness and mitigation projects in the Asia-Pacific region.

USAID/OFDA/Asia Preparedness and Mitigation Assistance

Regional Programs

- **Program for Hydro-Meteorological Risk Mitigation in Asian Cities (PROMISE):** In September 2005, USAID/OFDA provided a grant to the Asian Disaster Preparedness Center (ADPC) for a new three-year phase of urban disaster mitigation activities entitled PROMISE. This program builds upon the activities of the Asian Urban Disaster Mitigation Program (AUDMP) through which pilot disaster preparedness projects were developed in targeted cities in Asia. PROMISE promotes hydro-meteorological disaster preparedness through demonstration projects in five highly vulnerable secondary urban centers in South and Southeast Asia, including Chittagong, Bangladesh; Hyderabad, Pakistan; Dagupan City, the Philippines; Kalutara, Sri Lanka; and Da Nang, Vietnam. All five target cities are rapidly growing urban areas with significant impacts from hydro-meteorological disasters within the past five years. Activities planned in the target cities include: preparedness and mitigation action planning workshops; hazard mapping and vulnerability assessments; the establishment of community-based early warning mechanisms; training and capacity building for risk-based urban land use planning; piloting community-based flood forecasting and warning systems; developing city-level disaster management information system and public awareness and advocacy campaigns; and the facilitation of micro-credit enterprises as part of pre-disaster relief packages to promote proper construction and improve resistance of houses to disasters. Total PROMISE funding since FY 2005 is \$1,000,000.....**FY 2006 \$500,000**
- **Program for the Enhancement of Emergency Response (PEER), Phase II:** PEER is a USAID/OFDA-funded program to promote disaster preparedness through the development of national and regional cadres of professional emergency response instructors. PEER is geared primarily towards earthquake preparedness, but is widely applicable to any collapsed structure or mass casualty situation. PEER assists local, regional, and national disaster management agencies in organizing and conducting training in Medical First Response, Collapsed Structure Search and Rescue, and Hospital Preparedness for mass casualties after a disaster. The first phase of PEER, managed by the ADPC, began in 1998 in India, Indonesia, Nepal, and the Philippines. Phase II of PEER, implemented by the National Society for Earthquake Technology (NSET) based in Nepal, continues the activities begun in the original countries with the addition of Bangladesh and Pakistan. During Phase II, PEER will increase the corps of trainers, adapt courses to national requirements, introduce a hospital-preparedness course for mass casualties, and create a coordinating network of disaster responders in each country. Phase II of PEER began in March 2003 and will continue through March 2008. Total PEER funding since FY 1998 is \$9,488,453.....**FY 2006 \$2,290,336**
- **Pacific Islands Disaster Assistance Program (PDAP):** USAID/OFDA has supported PDAP implemented by The Asia Foundation (TAF) since 1995. The objectives of the program are to: improve the capacity and performance of local and national disaster management agencies and individuals; develop and adapt training materials relevant to the region; and strengthen the capacity of South Pacific nations to organize and conduct disaster management courses. The Cook Islands, Fiji, Kiribati, Niue, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga, Tuvalu, and Vanuatu participated in the first phase of the program. The first phase worked to improved disaster management training in multiple South Pacific nations. From 2004 to 2008, Phase II continues activities begun in the initial countries, with the

addition of the Federated States of Micronesia and the Republic of the Marshall Islands which will transition in 2007 to USAID from the Federal Emergency Management Agency (FEMA) for U.S. disaster assistance. Adaptation of USAID/OFDA-developed training materials for Pacific country applications are included in this phase of activities. Total funding to date is \$3,605,084.....**FY 2006 \$544,943**

- Asia Flood Network (AFN): AFN aims to strengthen the capacity of regional and national hydro-meteorological institutions in climate, weather, and hydrological forecasting, directly involving communities at risk to reduce vulnerability to hydro-meteorological hazards. In collaboration with partners in Asia, AFN is jointly implemented by USAID/OFDA, the National Oceanic and Atmospheric Administration (NOAA), and the U.S. Geological Survey (USGS). Current activities are focused on the Mekong and the Ganges-Brahmaputra-Megna (GBM) river basins. USAID/OFDA, in cooperation with NOAA and USGS, has been providing 24-hour satellite estimates and short-term forecasts of rainfall over the region. Under AFN, riparian country representatives in the Mekong and GBM river basins have been trained on the use of satellite-based rainfall estimates and forecasts in 2005. In addition, USAID/OFDA, NOAA, and USGS conducted training in collaboration with the Mekong River Commission (MRC) and the International Center for Integrated Mountain Development (ICIMOD) on flash flood guidance and dissemination of information to vulnerable population in remote areas. This program will continue through August 2008. To date, USAID/OFDA has provided \$2,000,000 of the estimated \$2,500,000 total cost.....**FY 2006 \$500,000**
- Technical Assistance for Hydro-meteorological Disasters: The U.S. National Weather Service and USGS, with support from USAID/OFDA, provides technical advice and guidance to MRC and ICIMOD on various hydro-meteorological issues including community-based flood mitigation, data collection systems using telecommunications for real-time data collection and transmission, and data sharing in trans-boundary river basins. Total project funding to date is \$170,000.
- Volcano Disaster Assistance Project (VDAP): The USAID/OFDA-funded VDAP program, implemented by the USGS, provides technical assistance to national volcano monitoring organizations. In Asia, VDAP provides technical assistance to the Philippines Institute of Volcanology and Seismology, the Center of Volcanology and Geological Hazard Mitigation (CVGHM) in Indonesia, and to the Port Moresby Geophysical Observatory and Rabaul Volcano Observatory in Papua New Guinea. In FY 2005, VDAP initiated a multi-year project to assist CVGHM to improve volcano hazard monitoring and assessment through construction of a regional volcano observatory for North Sulawesi and the nearby Sangihe Island volcanoes, where more than 500,000 people live on the flanks of hazardous volcanoes. VDAP assistance includes training on conducting hazard assessments, development of early warning plans, installation and updating of volcano monitoring equipment, and technology transfers. In FY 2006, VDAP members deployed to Papua New Guinea, the Philippines, and Indonesia to assist with volcanic emergencies. The largest response occurred in April 2006, when in response to an increase in volcanic activity at the Mount Merapi volcano located in central Java, Indonesia, a four-member USAID/OFDA-funded VDAP team from the USGS assisted Indonesian authorities in monitoring the volcano.....**FY 2006 \$465,000**

South Asia Programs

- India Earthquake Safety Initiative: Implemented by GeoHazards International, the program conducts risk assessments and risk reduction activities in 20 of India's most earthquake-prone urban areas, and implements mitigation activities in 5 of those areas. This program, co-funded by USAID/OFDA and USAID/India, began in September 2002 and continued until October 2005. Total USAID/OFDA funding to date is \$650,000.
- Incident Command System (ICS) Training: Co-funded by USAID/OFDA and USAID/India through an interagency agreement with the U.S. Forest Service, this capacity-building program provides ICS training and simulation exercises at the national and state levels in India and the region. The program also provides technical assistance and training to government and non-government disaster managers to assist them in developing coordinated disaster response planning. The second phase, which began in 2002, will continue through September 2006. To date, USAID/OFDA has provided \$1,706,712 to support the program.
- Regional Flood Forecasting: Since November 2001, USAID/OFDA has supported technical assessments and forums that bring together decision-makers and technical personnel from the Hindu Kush-Himalayan region to promote collaboration and share information related to flood management, flood early warning systems, and broader trans-boundary water issues. ICIMOD, based in Kathmandu, Nepal, hosts the forums. Afghanistan, Bangladesh, Bhutan, Burma, China, India, Nepal, and Pakistan participate in the program. In FY 2006, USAID/OFDA provided additional support to ICIMOD to strengthen community involvement and improve understanding of flash floods, forecasts, and

warnings. The project aims to reduce vulnerability to flash floods in the Himalayan region through greater participation of flood-prone communities in flood risk management. Key stakeholders and communities will be provided with an integrated mitigation strategy that includes information, knowledge, tools, and guidance. Training is based upon ongoing needs assessment, knowledge synthesis and transfer, networking, and field demonstration to develop preparedness for flash floods. Key government agencies, non-governmental organizations (NGOs), and academic institutions will engage in this project.....**FY 2006 \$165,710**

- Community Flood Monitoring and Forecasting in Bangladesh: Implemented by Riverside Technology Inc., this five-year USAID/OFDA project supports a community-based approach for flood monitoring and forecasting to reduce the vulnerability of communities living in flood plains and mitigate future flood damage in Bangladesh. The project began in September 2002 and ends in September 2007. Total funding to date is \$576,977.
- Kathmandu Valley Earthquake Risk Management Project: NSET in Kathmandu, Nepal, works with the Government of Nepal, NGOs, schools, and local communities to increase earthquake awareness and preparedness by coordinating and monitoring the long-term earthquake risk reduction plan for the Kathmandu Valley. The project began in September 2000 and will continue through August 2006.**FY 2006 \$145,078**
- Emergency Flood Preparedness in Bangladesh: CARE (lead agency), Save the Children/U.S., and World Vision have joined to form the Emergency Working Group of Cooperative Sponsors (EWG) to improve emergency response to floods in Bangladesh. The EWG also works to reduce the incidence of health problems associated with a disaster, particularly water-borne diseases. With USAID/OFDA funding, the EWG will foster coordination between communities and local authorities, maintain and operate a mobile water purification plant and zodiac boats, and operate a mobile health clinic/water ambulance. Total funding to date is \$200,013.....**FY 2006 \$100,013**
- Drought Preparedness in India and Pakistan: In FY 2006, USAID/OFDA provided \$400,000 to Catholic Relief Services (CRS) for drought preparedness activities in India and Pakistan. This three-year project seeks to help ensure that communities in Rajasthan, India, and Sindh, Pakistan, are drought resilient. The project targets 7,200 people in Sindh and 60,000 people in Rajasthan. Through this program, drought-vulnerable communities will be better able to harvest and store rainwater for increased domestic and agricultural use throughout the year; adopt water-efficient agricultural practices; adopt improved land-use techniques for agriculture and livestock; and use linkages with government and other actors to improve resilience to drought. The project began in June 2006 and will continue through September 2008. The total cost of the project will be \$798,795.....**FY 2006 \$400,000**
- Technical Assistance for the Development of the Pakistan National Seismic Network (PNSN): USAID/OFDA is providing funding to USGS to assist the Government of Pakistan (GOP) in establishing a new seismographic network of stations in and around earthquake-prone cities in Pakistan. At the request of the Pakistan Meteorological Department's, USGS is providing technical expertise to assist in the deployment of a national seismic network. The USGS task is advisory, including training of personnel, recommendations for site selection, specification of instruments, suggestions for methods of data transmission, data processing at a central location, and other issues of seismic-network design. This cooperation will aid in the construction of a critical national resource for the Pakistani population in the event of future natural disasters such as those that have occurred in recent years.....**FY 2006 \$66,263**

Southeast and East Asia Programs

- Flood Early Warning Systems in the Mekong River Basin: This activity is implemented by MRC, an inter-governmental river basin organization based in Vientiane, Laos. In January 2003, USAID/OFDA and MRC began an innovative demonstration project to strengthen warnings to communities most at-risk to floods. The project works with the most flood-vulnerable communities in Cambodia to develop useful and understandable flood information for these communities. In addition, the project develops tools, methods, and protocols— with the help of community-based implementing partners— to enable flood-vulnerable populations to effectively prepare and respond to MRC flood information. This five-year program began in January 2003 and ends in December 2007. Total funding to date is \$1,229,855.....**FY 2006 \$275,000**
- Climate Forecast Applications: This project is a follow-up initiative to the 1998-2003 “El Niño” related Extreme Climate Events Program. The Climate Forecast Applications project, implemented by the ADPC, strengthens the national capabilities of Indonesia and the Philippines to manage and reduce the impacts of climate fluctuations through targeted demonstration projects and community participation. The project develops decision support tools and capacities to reduce vulnerability to climate variability at the community level and mobilize communities to utilize the

climate forecast data for agriculture and other livelihood purposes. The second-phase of the program began in April 2003 and will conclude in April 2008. Total funding from FY 1998 to FY 2006 is \$2,237,863.....**FY 2006 \$325,000**

- Flood Proofing for Households in the Mekong Delta Vietnam: USAID/OFDA funded the U.N. Development Program (UNDP) from June 2000 through December 2004 to implement a comprehensive flood preparedness program in Quang Binh, Quang Tri, Thua Thien-Hue, Da Nang, Quang Nam, Quang Ngai, and Binh Dinh provinces of central Vietnam. Working in collaboration with the Government of Vietnam's (GVN) Ministry of Agriculture and Rural Development, the program included: 1) training of disaster officials and the affected populations on the use of flood mapping to reduce loss of life, economic consequences, and disruption of livelihoods; 2) implementation of river flood alert systems in three river basins in central Vietnam; and 3) a television and radio flood disaster warning system at the national level and in three provinces of Vietnam. A follow-on program, flood proofing of homes in the poorest flood-prone villages in the Mekong Delta, was initiated in September 2005 and will continue through October 2006. Total project funding to date for both programs is \$1,394,250.
- Coastal Storm Early Warning System in Vietnam: USAID/OFDA provides funding to UNDP, working in collaboration with the GVN's Ministry of Agriculture and Rural Development, for the implementation of a radio-based coastal storm warning system. Using radio broadcasts, the project will provide early warnings for fishing boats up to 65 miles offshore and for 25 coastal provinces of Vietnam. The NOAA National Weather Service assisted the GVN with the design of the storm warning system. UNDP is working with the GVN to design community-based disaster preparedness training for subsistence fishing populations at the commune and village levels. This project began in May 2001 and was completed in December 2005. Total project funding to date is \$1,440,000.
- Conflict Preparedness Program in Mindanao, Philippines: Implemented by Save the Children/Philippines, the first phase of this initiative supported disaster preparedness activities in response to new internal displacement and provided prompt access to these populations in the conflict-affected areas of western Mindanao. The program supports an emergency response network of local NGOs and community-based groups to implement preparedness and relief activities, provide small grants to local NGOs, and create small stockpiles of locally procured relief items for emergencies. The second phase of this initiative supports returning internally displaced persons (IDPs) through livelihood interventions using seeds and tools, basic fishing equipment, and other assistance. The program also supports community activities to ensure potable water resources. Initiated in March 2003, these programs will continue until October 2006. Total project funding to date is \$1,100,000.....**FY 2006 \$100,000**
- Preparedness Program in Mount Mayon: Through the Philippine National Red Cross (PNRC), this program supported disaster preparedness efforts, including water and sanitation interventions, for families evacuated from the vicinity of Mount Mayon volcano in Bicol Province, Philippines in September 2006.....**FY 2006 \$17,600**
- Preparedness Program in Mount Merapi: Through the International Federation of Red Cross and Red Crescent Societies (IFRC) and the Indonesian Red Cross (PMI), this program supported disaster preparedness efforts, including water and sanitation interventions and the distribution of non-food items, for families evacuated from the vicinity of Mount Merapi in Central Java and Yogyakarta provinces, Indonesia in April and May 2006.....**FY 2006 \$50,000**
- Strengthening Emergency Preparedness and Response in Indonesia: The International Medical Corps (IMC), with USAID/OFDA support, is promoting the technical, administrative, financial, and logistical capabilities of Ambulan 118, a leading Indonesian NGO, to respond rapidly and effectively to disasters in Indonesia. Through this project, IMC is strengthening and expanding training in emergency relief best practices and creating a training-of-trainers program. In addition, Ambulan 118 and IMC are pre-positioning medical and non-medical equipment and supplies in the field. A 60-person medical team from Ambulan 118 and IMC provided emergency medical care to survivors of the May 2006 Yogyakarta earthquake through this project. This project began in September 2005 and will continue through September 2007. Total funding to date is \$1,200,000.....**FY 2006 \$450,000**
- Avian Influenza Preparedness: Since December 2003, 10 Asian countries have reported outbreaks of the "H5N1" Avian Influenza virus, and 125 people have died in Indonesia, Vietnam, Cambodia, and Thailand. In FY 2004, USAID/OFDA provided \$250,000 to the U.N. World Health Organization (WHO) to support Avian Influenza containment activities in the region. In FY 2005, USAID/OFDA pre-positioned 10,000 sets of personal protective equipment (PPE) in the countries most at risk—Cambodia, Thailand, Laos, Vietnam, and Indonesia. In FY 2006, USAID/OFDA provided funding to the American Red Cross to facilitate, in cooperation with host-country Red Cross Societies, Avian Influenza preparedness and response workshops in Cambodia and China. The workshops brought together Red Cross staff and volunteers from throughout the respective countries, as well as government officials,

members of the international community, and human and animal health experts. USAID/OFDA is an active participant of USAID's Avian Influenza Working Group, which works with other agencies involved in Avian Influenza preparedness and response, including the U.S. Department of Agriculture, U.S. Department of Health and Human Services, U.S. Department of State, and U.S. Department of Defense. USAID/OFDA funding to date is \$621,450.....**FY 2006 \$130,000**

- **Drought Preparedness:** In FY 2006, USAID/OFDA provided \$700,000 to CARE for drought preparedness activities in Cambodia and East Timor. The goal of this program is to promote target communities' capacity in these countries to undertake community-based preparedness planning while also developing expertise in effective low-cost and innovative drought mitigation and preparedness technologies. The total cost of the project will be \$1,200,000.**FY 2006 \$700,000**
- **Promoting the Private Sector Role for Disaster Assistance in China:** In FY 2006, USAID/OFDA provided \$350,000 to TAF to enhance private sector participation in and contribution to disaster preparedness and to promote multi-sectoral approaches to disaster management. TAF plans to cooperate with the American Chamber of Commerce, domestic business associations, and the Ministry of Civil Affairs, which has a lead role in disaster management in China. The program will also involve domestic NGOs and charities such as the China Charity Federation and other organizations. This project will begin in October 2006 and will continue to September 2008. The total cost of the project will be \$590,000.....**FY 2006 \$350,000**
- **U.S./Japan Community-based Preparedness:** USAID/OFDA provided \$74,908 in FY 2006 to the Japan-based Asian Disaster Reduction Center (ADRC) to implement a school-based disaster preparedness program in Galle District, Sri Lanka. ADRC is working collaboratively with the Sri Lanka National Disaster Management Center and the Department of Education to help raise school awareness of the effect of natural disasters and to develop strategies and capacity building for risk reduction.....**FY 2006 \$74,908**

Total USAID/OFDA FY 2006 Preparedness and Mitigation Assistance.....\$7,649,851

USAID/OFDA FY 2006 Preparedness and Mitigation Assistance by Sector

| Project Name | Hydro-Met | Earthquake/ Volcanoes | Health | Conflict | Multi- Hazard |
|--|-----------|--------------------------|-----------|-----------|------------------|
| PROMISE | \$500,000 | | | | |
| PEER, Phase II | | | | | \$2,290,336 |
| Pacific Islands Disaster Assistance Program | | | | | \$544,943 |
| Asia Flood Network | \$500,000 | | | | |
| Volcano Disaster Assistance Project | | \$465,000 | | | |
| Regional Flood Forecasting | \$165,710 | | | | |
| Kathmandu Valley Earthquake Preparedness | | \$145,078 | | | |
| Emergency Flood Preparedness in Bangladesh | \$100,013 | | | | |
| Drought Preparedness in India and Pakistan | \$400,000 | | | | |
| Technical Assistance to PNSN | | \$66,263 | | | |
| Mekong River Basin Flood Early Warning | \$275,000 | | | | |
| Climate Forecast Applications | \$325,000 | | | | |
| Conflict Preparedness in Philippines | | | | \$100,000 | |
| Preparedness at Mt. Mayon volcano | | \$17,600 | | | |
| Preparedness at Mt. Merapi volcano | | \$50,000 | | | |
| Indonesia Emergency Preparedness through IMC/Ambulan 118 | | | \$450,000 | | |
| Avian Influenza Preparedness | | | \$130,000 | | |

| | | | | | |
|--|--------------------|------------------|------------------|------------------|--------------------|
| Drought Preparedness | \$700,000 | | | | |
| Private Sector Role for Disaster Assistance in China | | | | | \$350,000 |
| U.S./ Japan Community-based Preparedness | | | | | \$74,908 |
| Total: \$7,649,851 | \$2,965,723 | \$743,941 | \$580,000 | \$100,000 | \$3,260,187 |

Total Cost of Active Programs to Date

| Project Name | Hydro-Met | Earthquake/ Volcanoes | Health | Conflict | Multi- Hazard |
|--|---------------------|----------------------------------|------------------|--------------------|--------------------------|
| AUDMP | \$500,000 | | | | \$9,453,800 |
| PROMISE | \$500,000 | | | | |
| PEER | | \$5,889,395 | | | \$3,599,059 |
| Pacific Island Nations Disaster Management Training Program | | | | | \$3,604,084 |
| Asia Flood Network | \$2,329,927 | | | | |
| Technical Assistance for Hydrometeorological Disasters | \$170,000 | | | | |
| Volcano Disaster Assistance Project | | \$2,965,000 | | | |
| India Earthquake Safety Initiative | | \$650,000 | | | |
| Incident Command System Training | | | | | \$1,706,712 |
| Regional Flood Forecasting | \$416,570 | | | | |
| Flood Forecasting in Bangladesh | \$576,977 | | | | |
| Kathmandu Valley Earthquake Preparedness | | \$796,633 | | | |
| Bangladesh Emergency Flood Preparedness | \$200,013 | | | | |
| Drought Preparedness in India and Pakistan | \$400,000 | | | | |
| Technical Assistance to PNSN | | \$66,263 | | | |
| Mekong River Basin Flood Early Warning | \$2,229,855 | | | | |
| Climate Forecast Applications | \$2,373,863 | | | | |
| Vietnam Flood Early Warning | \$1,394,250 | | | | |
| Vietnam Coastal Storm Early Warning | \$1,440,000 | | | | |
| Philippines Conflict Preparedness | | | | \$1,100,000 | |
| Preparedness at Mt. Mayon | | \$17,600 | | | |
| Preparedness at Mt. Merapi | | \$50,000 | | | |
| Indonesia Preparedness through IMC/Ambulan 118 | | | \$375,000 | | \$825,000 |
| Avian Influenza Preparedness | | | \$621,450 | | |
| Drought Preparedness | \$700,000 | | | | |
| Promoting Private Sector Role for Disaster Assistance in China | | | | | \$350,000 |
| U.S./Japan Community-based Preparedness | | | | | \$74,908 |
| Total: \$45,376,359 | \$13,231,455 | \$10,434,891 | \$996,450 | \$1,100,000 | \$19,613,563 |

USAID/OFDA bulletins appear on the USAID web site at http://www.usaid.gov/our_work/humanitarian_assistance/disaster_assistance/.